

Central Intelligence Agency



Washington, D. C. 20505

DIRECTORATE OF INTELLIGENCE

9 August 1985

Sub-Saharan Africa: Long-Term Economic Implications of the Drought

25X1

Summary

At least 20 Sub-Saharan African countries have been hit hard by drought since 1980, and, as a result, have experienced falling rates of economic growth and shortages of food supplies. The impact has varied considerably among the affected countries. The long-term implications are generally less serious in southern Africa. Rainfall starting in late 1984 has ended a three year drought there and will enable agricultural production in that region to recover soon from setbacks attributable to deficient rainfall. We expect the agricultural sectors in such countries as Kenya and Zimbabwe to resume their key role in promoting economic growth.

25X1

At the other extreme, the long-term implications are severe for the countries of the Sahel, in our judgment. The rainfall reported there this year will do little, in our view, to resuscitate a basically semi-arid region that has been

This memorandum was prepared for Malcolm Butler, Executive Secretary, Agency for International Development. It was written by of the Office of African and Latin American Analysis and coordinated with the Directorate of Operations. Questions and comments are welcome and may be directed to the Chief, Regional Issues Branch, Africa Division, on

25X1

25X1

25X1

ALA M 85-10068

25X1

~~SECRET~~

experiencing below normal rainfall patterns for nearly two decades.¹ Climatic changes and the adverse impact of a growing population on livestock grazing and land cultivation practices may have irreversibly damaged the productive capacity of the Sahelian countries. We believe that their long-term economic outlook is grim and that the Sahelian region as a whole probably will remain the poorest in Africa.

25X1

The drought's wide-ranging economic impact on Sub-Saharan countries reflects their large dependence on agricultural production for economic growth, employment, export earnings, and government revenues. The effects of the drought aside, the economic performance of Sub-Saharan Africa has long been constrained by numerous internal and external factors including high oil prices, weak export commodity markets, and economic mismanagement. These factors will continue to be the major determinants of the longer term economic performance of the drought-affected countries.

25X1

* * *

Introduction ²

Most observers regard Sub-Saharan Africa's economic prospects to be unfavorable over the long term, even in the absence of drought.³ Africa's drought-affected countries, however, are clearly at an economic disadvantage compared with the other states, although we believe the non-Sahelian countries among them to be better positioned because the drought outside the Sahel has been of shorter duration and generally less

¹ The Sahel is defined in this report as including Burkina, Cape Verde, Chad, The Gambia, Mali, Mauritania, Niger, and Senegal.

25X1

² This report covers the twenty Sub-Saharan countries listed early this year by the United Nations as worst affected by the drought in 1984-85: Angola, Botswana, Burkina, Burundi, Cape Verde, Chad, Ethiopia, Kenya, Lesotho, Mali, Mauritania, Mozambique, Niger, Rwanda, Senegal, Somalia, Sudan, Tanzania, Zambia, and Zimbabwe.

25X1

25X1

damaging. While the non-Sahelian countries will experience periodic, drought-induced shocks to their economic adjustment efforts, the Sahelian countries, in our judgment, will be compelled to recognize the presence or threat of drought as a permanent feature affecting the performance of economies highly based on agriculture. []

25X1

Sub-Saharan Africa's Weak Growth Record

The economic growth record of Sub-Saharan Africa, including the drought-affected countries, has been one of generally slow growth even in the best of times and a declining growth trend since the 1960s. Based on World Bank estimates the average annual growth rate for the region fell from 4 percent in the 1960s to 3 percent in the 1970s. So far in the 1980s we estimate the annual growth rate at less than 2 percent, with the period 1982-84 averaging less than 1 percent. []

25X1

While drought has played a major role in depressing the economic performance of Sahelian countries like Chad and Mali, we believe that most other countries in Sub-Saharan Africa share certain economic characteristics that have conditioned economic growth since the 1960s, and will continue to do so over the longer term, regardless of weather conditions. Based on a review of African development literature these factors include, in our judgment:

- undeveloped human resources, including shortages of skilled labor and managerial personnel. Deficiencies in education and training prevent most African countries from fully utilizing available technology to promote growth.
- an inherently unstable political climate characterized by multiple ethnic, regional, and religious cleavages.
- only moderately fertile soil, for the most part, because of geography and climate. Moreover, ingrained agricultural practices and the lack of financial resources have inhibited the introduction of more advanced farming techniques.
- fluctuating export earnings buffeted by unstable world market prices and by weak demand by industrial countries with problems of slow economic growth of their own since the 1970s.
- high prices for imported oil sparked by substantial increases in 1973-74 and 1979-80 that have adversely affected the purchasing power of exports.

- official pricing policies for domestic output, which favor urban consumers for political reasons or serve as important revenue sources to governments while providing little incentive to local producers.
- exchange rate policies that tend to avoid the political repercussions of needed currency devaluations and fail to discourage non-essential imports or to provide pricing incentives for exports.

In summary, the economies of most Sub-Saharan countries suffer from fundamental structural weaknesses that will continue to impair economic progress, regardless of changing climatic conditions. []

25X1

Impact of the Drought

Economic Growth

In our view, the short-term impact of the drought on economic growth in Sub-Saharan countries since 1980 has been dramatic, clearly sharpening an already evident trend. On the basis of IMF data and economic surveys the effect has been greatest in Ethiopia, where the economy contracted last year after a rising growth rate of 4 percent in 1983. The impact has been less abrupt in Mali, Senegal, and Sudan where growth rates have been declining since 1982, and in Burkina and Lesotho where a progressive drought-induced downturn can be traced back to 1981. []

25X1

Overall economic conditions in Sub-Saharan African countries are particularly sensitive to weather because of the importance of agriculture in domestic production, employment, and income. In most of the drought-affected countries agriculture accounts for at least one-third of Gross Domestic Product (GDP) and, in the case of Burundi, as much as 60 percent, according to IMF data. Moreover, widespread subsistence farming makes agriculture's role in creating employment and income critical even when its contribution to GDP is relatively small. In Senegal, for example, agriculture represents 12 percent of GDP but provides 70 percent of employment. []

25X1

For at least seven Sub-Saharan countries--Burundi, Kenya, Lesotho, Rwanda, Tanzania, Zambia, and Zimbabwe--the drought-induced damage to agriculture has already been substantially repaired by the advent of rains in late 1984. Indeed, in July 1985 these countries were removed by the Food and Agriculture Organization of the United Nations (FAO) from its latest list of 21 countries (including Morocco) seriously affected by

drought. According to US Embassy reporting and open sources, Tanzania and Zimbabwe are recording or expecting bumper food crops while the food crisis has disappeared in the other five countries. Consequently, we believe the drought will have little long-run impact on economic growth in these countries, although most will continue to face generally weak economic growth prospects for the reasons identified earlier.

25X1

Other parts of the region have been less fortunate. Substantial climatic and economic evidence strongly suggests that the drought problem of the Sahel is of a different order of magnitude from that of the rest of Africa. The drought conditions have lasted for nearly two decades and have, in our judgment, fundamentally impaired the agricultural capacity and economic growth potential of the Sahelian countries, although not all to the same extent.

25X1

The drought's impact has been particularly severe in Chad. The desert has shifted 200 kilometers southward within Chad since 1975, according to IMF and open reporting, prompting sizable movements of northern nomads and their cattle onto land normally committed to agriculture. Desertification in Chad is likely to continue, in our view, with bleak implications for the country's growth outlook. In Mali, the southern part of the country has been somewhat less affected by the drought. The IMF estimates Mali made marginal gains in Gross Domestic Product (GDP) in 1984, largely through increases in cotton and groundnut production. However, with an economy based on agriculture and livestock rearing, Mali's harsh Sahelian environment precludes any substantial economic growth over the longer term. In Mauritania and Niger economic growth will continue to be substantially determined by iron ore and uranium mining, respectively, given agriculture's bleak outlook. Even so, economic growth prospects for these two countries are not bright since their mineral exports are subject to the vagaries of world market fluctuations.

25X1

The impact of the drought on Ethiopia and Sudan places these countries between the extremes of the systemically affected Sahelian countries and those of southern Africa hit by a worse than average cyclical pattern of rainfall. Both of these large countries have experienced different degrees of drought in different regions. Partly as a result, export agriculture, although impaired, has held up reasonably well, but there have been serious shortages in domestic food supplies.

25X1

25X1

For Ethiopia, the short-term impact of the drought has been principally on subsistence agriculture.⁴ On the basis of US Embassy reporting and partial IMF data, export agriculture has not been substantially affected. So far, the drought has been concentrated in the northern part of the country whereas coffee, the main agricultural export, is grown in the rain-fed southeastern and southern highlands. We believe that the drought's long-term impact on Ethiopia's subsistence agriculture will impair economic growth through the country's continued dependence on food imports, and the disruptive effect on production of a drought-induced refugee population. Over the longer term, however, Ethiopia's poor economic growth prospects, in our view, will stem more from serious production problems such as continued soil degradation from erosion, deforestation, and primitive farming techniques; the disruptive influence of insurgency; and the adverse impact of government policies that have reduced incentives for farmers to produce for the market. []

25X1

For Sudan, the three-year drought has been severe enough to impair agricultural production in both rain-fed and irrigated areas, according to IMF reporting. Over the long run, we believe the drought has simply added to a long list of adverse factors that have restricted economic performance since the mid-1970s. Among these factors have been a poor outturn in agricultural export commodities, partly because of insufficient incentives for production, an overvalued exchange rate, and the unwillingness of the Sudanese authorities to adopt sufficient economic reform measures. The recent insurgency in the south has compounded Sudan's economic problems by introducing a new element of instability to the country. As in the case of Ethiopia, the drought probably will continue to impede Sudan's efforts to feed its people thus placing long-term burdens on an economy with already weak growth potential. []

25X1

Among the remaining drought-affected countries we believe Mozambique's drought-related economic problems have compounded the precipitous declines in annual production that have been taking place since independence in 1975, well before the recent drought. The drought impact has been magnified by insurgent interruption of agricultural activity and by massive migrations of people fleeing both famine and

25X1

insurgency. Even in the event of several consecutive rainy seasons, we do not believe that Mozambique can soon recover from the catastrophic conditions of the past few years. After years of sweeping nationalization measures, nearly nationwide insurgent activity, and the recent drought-induced famine, the economy is barely functioning, in our view, and is unlikely to improve without drastic economic reform. []

25X1

For several of the other countries, such as Botswana, Cape Verde, Mauritania, and Somalia the drought has affected a basically semi-arid environment in a cyclical manner. In these circumstances, we believe semi-arid conditions plus other long-standing economic problems such as undeveloped human resources and poor economic management will exert more influence on growth over the longer term than the recent shortages of rain. []

25X1

Foreign Trade

Exports. We have little evidence that the exports of the drought-affected countries have been significantly affected since 1980 by weather, or that they will be over the longer term. In 1984, the final year of the recent dry spell, export values increased for all countries for which partial or whole year data are available, including Ethiopia and Mauritania. []

25X1

Several factors account for the unusual performance of African exports in the face of severe drought.

- o Export agriculture is generally conducted in the less arid portions of a country. Ethiopia (coffee) and Sudan (cotton) provide examples.
- o In Sahelian countries and elsewhere in Africa, export agriculture is likely to benefit from whatever major irrigation facilities exist. Even when food supplies fall short, governments usually try to promote export agriculture because it earns scarce foreign exchange. Thus, Kenya's 1984 exports were up 19 percent, sparked by coffee and tea trade, even as the food gap widened.
- o Export agricultural products are generally not important in domestic food supplies, so governments are under less pressure to reallocate potential exports toward internal consumption in times of famine. Groundnuts in The Gambia, Mali, and Senegal are one exception.

- o The export performance of some drought-affected countries does not depend on the weather's impact on agricultural land. For example, diamonds were mainly responsible for Botswana's 23 percent growth in export sales in 1984, while iron ore and fish sparked Mauritania's 16 percent gain. []

25X1

Over the longer term, we do not expect the recent drought to have a major impact on the exports of drought-affected countries, although they will remain dependent on seasonal rainfall. Unlike domestic food supplies largely generated from subsistence agriculture, we expect that agricultural exports will continue to be cushioned by generally favorable locations within drought-stricken countries and by possible priority treatment by governments. []

25X1

Imports. We believe that observed increases in imports by most drought-affected countries since 1980 were driven by an increased need for imported food in the wake of drought-induced shortages in domestic supplies, although the data are incomplete. While increased imports tend to worsen the balance of payments position of the countries involved and run counter to the economic adjustment programs that several of them are implementing, we believe that the adverse financial effects have been eased by several factors. Much of the substantial food and other economic aid that has flowed to Africa in the wake of the drought was in the form of grants, which cushion the impact of food imports on the balance of payments. For example, partial balance of payments data on Burkina, Mali, and Niger--all substantial aid recipients--show international reserves at yearend 1984 at their highest levels since the onset of the recent dry spell. On the other hand, the international reserves of Ethiopia and Sudan have fallen, despite massive drought relief. Aid receipts there apparently did not offset the combined financial demands of drought, refugees, and insurgency. []

25X1

Over the longer term, however, we believe the drought will have a major impact on the import patterns of the more seriously affected countries, particularly in the Sahel. These countries will continue to be plagued with food deficits, which will require food imports largely from industrial countries with grain surpluses. In some cases, the need for food imports will be aggravated by the semi-permanent refugee population in the region, particularly in Ethiopia and Sudan, which now numbers over one million. Few refugees engage in productive economic activity; most impose a continual demand on the already inadequate capabilities of host countries. []

25X1

We are pessimistic about the longer term outlook for imports even for those countries subject only to seasonal variations in rainfall. Much of

these imports are capital goods needed for economic development, but foreign exchange shortages have restricted imports even in comparatively good times. The exports of these countries, nearly all primary commodities, are the principal means of acquiring foreign exchange to pay for imports, but export earnings have been unstable because of fluctuations in primary commodity prices in world markets. On the other hand, import prices, mainly for oil and manufactured goods, have remained high. As a result, these countries have received comparatively less for their exports at the same time that they need increased imports to offset declining economic growth rates. Caught in this dilemma, which we believe will persist, even countries lightly affected by the drought will remain subject to import restraints over the longer term.

25X1

Government Budgets

We do not see any major long-run implications for the government budgets of the drought-affected countries. They have had a wide range of budgetary experiences, conditioned in many cases by considerations other than drought. According to US Embassy and IMF reporting:

- Burkina's budget deficits have been expanding with a slowdown in revenue growth in 1983 and 1984 because of declining economic activity. The deficits have been financed almost entirely through concessional foreign borrowing related to development projects.
- Despite the financial burden of civil war, Chad made major cuts in budgetary appropriations in 1983 and 1984 as a part of its budget reform program. Chad's export tax receipts were buoyant last year from higher levies on export cotton and a 26 percent increase in cotton export volume.
- Ethiopia's tax revenues dropped with the economic slowdown, but its budgetary deficits have been mainly financed by a multitude of foreign sources, including the International Development Association of the World Bank Group, The IMF Trust Fund, the African Development Bank, the European Community, Soviet bloc countries, and China.
- Mali's revenue position has been affected by declines in head and cattle tax receipts. Mali's major budgetary problem in the longer term, in our view, is the government wage bill, now 65 percent of expenditure, a problem unrelated to weather conditions.
- Niger reduced its budget deficit from 7 percent to 5 percent of GDP between 1982/83 and 1983/84, reflecting a cutback in investment expenditure included in its economic adjustment program. Niamey succeeded in reducing its budget deficit last

year, a factor which contributed to reduced inflation and an improved current account balance.

- Senegal has faced falling revenues and rising expenditures, partly from the drought, but also because of deficient tax administration. A newly launched IMF-sponsored economic adjustment program should improve the budget picture over the medium term. []

25X1

Although circumstances differ among countries, in most cases revenue constraints appear to have occurred from reduced economic activity in general rather than from declines in the export sector. Because export sales have held up in most cases for which data are available, losses in export taxes are unlikely to have been sizable and would only have occurred from declines in export volume, assuming no change in per unit tax charges. Although data for 1984 trade volumes are scanty, we do not believe any of the drought-affected countries sustained significant volume declines in exports last year. Indeed, preliminary IMF export volume data indicate volume increases last year not only for Chadian cotton, but also for Ethiopian coffee and Mauritanian iron ore. []

25X1

The budget situation of the drought-affected countries has held up for other reasons as well. Despite the drought, several countries, including, Mali, Niger, and Senegal, have been broadening their tax bases and curbing the growth in their expenditures as they implement IMF-supported economic adjustment programs which invariably include budgetary reform. Moreover, the financial burden of the drought is being mainly borne by aid donors in the form of grants and concessional loans. While the onset of drought may worsen a government's budget position in the short term, we do not see this development as being a major factor over the longer term when more time is available for mobilizing external resources to help finance budget shortfalls. []

25X1

Investment

Because of their low incomes, drought-affected African countries have traditionally generated little saving to support domestic investment. At the extreme, Burkina has been a consistent negative saver with consumption exceeding GDP and has needed foreign resources to support consumption patterns and any investment that takes place, according to IMF data. In Ethiopia, consumption is 97 percent of GDP and in Burundi, and Niger, 93 percent each. While up-to-date investment data are spotty at best, we believe the drought has aggravated this situation. []

25X1

While the drought may have reduced saving (raised consumption expenditures) relative to GDP, it has also elicited inflows of foreign resources, grants, and concessional loans. Consequently, capital formation may not have been adversely affected by the drought.

25X1

Even so, economic adjustment programs in nearly all Sub-Saharan African countries have called for curtailed capital expenditures to ensure more manageable budget deficits. Incomplete data on Gross Domestic Investment as a percent of GDP show this ratio to be declining in Kenya, Lesotho, Niger, Tanzania, and Zambia. We believe this trend reflects both tighter fiscal management and drought-induced poverty. An upward trend has been observed for Rwanda and no change for Ethiopia and Mali.

25X1

For drought-affected countries, we regard domestic investment to be principally a function of foreign aid inflows in support of development projects. Over the longer term, therefore, this investment will continue to depend on the response of industrial countries to the economic plight of African countries. Most Sub-Saharan African countries will remain unable, in our view, to contribute meaningfully to domestic capital formation.

25X1

SUBJECT: SUB-SAHARAN AFRICA: Long-Term Economic Implications
of the Drought

Distribution:

- Original - Malcolm Butler, Executive Secretary, Agency for International Development
- 1 - Princeton Lyman, Deputy Assistant Secretary, Bureau of African Affairs, Department of State
 - 1 - Arthur E. Dewey, Deputy Assistant Secretary for International Assistance and Relief, Bureau for Refugee Programs, Department of State
 - 1 - Antonio Gayoso, Director, Office of International Development, Office of the Deputy Assistant Secretary for International Economic and Social Affairs, Bureau of International Organization Affairs, Department of State.
 - 1 - Richard W. Bogosian, Director, Office of East African Affairs, Department of State.
 - 1 - Peter W. Lande, Director, Economic Policy Staff, Bureau of African Affairs, Department of State.
 - 1 - Pierre Shostal, Director, Office of Central African Affairs, Department of State.
 - 1 - Robert Gelbard, Director, Office of Southern African Affairs, Department of State.
 - 1 - Howard K. Walker, Director, Office of West African Affairs, Department of State.
 - 1 - Jeffrey S. Davidow, Director, Office of Regional Affairs, Department of State.
 - 1 - Mark L. Edelman, Assistant Administrator, Bureau for Africa, Agency for International Development.
 - 1 - Anthony S. Dalsimer, Office of Analysis for Africa, Bureau of Intelligence and Research, Department of State.
 - 1 - Lydia Giffler, Office of Economic Analysis, Bureau of Intelligence and Research, Department of State
 - 1 - Janet Henninger, Office of Global Issues, Bureau of Intelligence and Research, Department of State.
 - 1 - Richard B. Levine, Deputy Director for International Economic Affairs, National Security Council.
 - 1 - T. Kelley White, Interagency Food Aid Analysis Working Group, Economic Research Service, U.S. Department of Agriculture.
 - 1 - DCI
 - 1 - DDCI
 - 1 - DDO/Africa
 - 1 - NIO for Africa

1 - NIC Action Group
1 - PDB Staff
1 - ILS
1 - C/DDI/PES
1 - D/ALA
1 - D/NESA
1 - D/OEA
1 - D/SOVA
1 - D/OCR
1 - D/OGI
1 - ALA/PS
1 - ALA Research Director
4 - OCPAS/IMD/CB
5 - ALA/AF
2 - AF/RI
4 - ALA/RI

25X1

ALA/AF (6 August 1985)

25X1